

(U.S. Patent No. 4,528,500; hereinafter "Lightbody"). Additionally, Claims 5 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lazzery in view of Lightbody as applied to Claim 1 above, and further in view of Hiramoto et al (U.S. Patent No. 5,847,783; hereinafter "Hiramoto"). The Office Action also rejected Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Lazzery in view of Lightbody as applied to Claim 1 above, and further in view of Iguchi (U.S. Patent No. 5,233,451; hereinafter "Iguchi"). Applicants submit that the pending amended claims are patentable over the cited art for at least the following reasons.

Claim 1 claims, in pertinent part: "[a] display device [including]... a resilient connection pin which provides a variable-pressure metal-metal contact[.]"

As stated in previous prosecution, in Lazzery, the conductor, although resilient due to the underlying rubber, is a plurality of spaced apart at least partially encircling lines (78) of conductive material. The conductive material encircles an insulating material (such as Mylar) wrapped around cylinder 70. Lazzery's conductor is substantially more complex to produce and insert into a Liquid Crystal Module than Applicants' connection pin. It requires conductors wrapped around Mylar, wrapped around rubber, wrapped around a wire, which is held in place by slots in which the wire must be inserted (see, e.g.,

col. 2, line 45 to col. 4, line 27). Further, Lazzery lacks the advantage of added contact reliability from variable-pressure metal-metal contact provides in a manufactured standard pin.

The present Office Action cites Lightbody as disclosing an electrically conducting connection pin board (11) having a plurality of resilient connection pins (12) providing variable-pressure metal-metal contact. Even substituting pin board 11/pin 12 assembly for the previous argument, Lightbody and Lazzery cannot be properly combined. Since Lazzery's contact requires conductors wrapped around Mylar, wrapped around rubber, wrapped around a wire, which is held in place by slots in which the wire must be inserted, and Lightbody utilizes double ended pins 12 distributed through pin board 11, one of ordinary skill in the art at the time of the invention would not have the requisite motivation to combine the two references for the purpose of improving connection and stabilization.

The Office Action argues, on Page 6, that Lazzery's contact assembly is modified by replacing it with the Lightbody pin board, which is routine to one of skill in the art. This is not the case because Lazzery's conductive connection is not the equivalent of, nor would one of ordinary skill in the art replace Lazzery's rubber/metal contact with a test pin board containing pins of Lightbody because rubber and resilient pins function in such substantially different ways. (See, e.g.,

*Slimfold Mfg. Co. v. Kinkead Industries, Inc.*, 932 F.2d 1453, 18 USPQ2d 1942 (Fed Cir. 1991) where a latch and a wedge were held to have very different modes of operation, different enough in the way that it operates that it avoided infringement.) For example, Lazzery's contact assembly only provides a conductive connection at the edges of a chip via terminals 40. Lightbody, on the other hand, shows resilient pins 12 on a matrix forming conductive connections at points 22 on circuit board 23. Further, contrary to the Office Action's arguments, pin board 11 is "a blank electrically non-conductive board" (See, e.g., Col. 4, lines 6-7). Additionally, Lightbody relates only to an apparatus for testing printed circuit boards and is designed to be removed after testing, whereas Lazzery requires dedicated contacts for a display assembly.

M.P.E.P. § 706.02(j) states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In addition, the Office Action states that it does not modify the Lazzery rubber part but rather, replaces it with Lightbody's pin board. However, to modify the invention in Lazzery to replace column 70 with a plurality of double pins, as in Lightbody, would require substantial manipulation of the cell. Evidence of such manipulation occurs in Lightbody, for example, in Col. 3, lines 49-62, "...small lips 18 serve to hold the pin board 11 vertically spaced in respect to the matrix substrate" and "locating pins 15 in combination with a tight fit of the pin board 11... prevent horizontal movement...." This would require a large effort on the part of one skilled in the art at the time of the invention to achieve the result. This further indicates that Lazzery and Lightbody cannot properly be combined.

Further, Lazzery relies upon clamping to maintain a tight and rigid fitting assemblage of parts and contacts. However, as recited in Lazzery, "[s]ome slight deformation of the connectors 24 thus occurs, the connectors bowing out slightly toward and against the cell lower substrate" (Col. 4, lines 39-42). Lazzery compensates for this deformation by including projections to serve as stops which limit the pressure applied against the resilient connectors (e.g., Col. 4, lines 42-46). Lightbody requires a mobile pin board 11 for testing multiple devices. It is unclear to Applicants how one skilled in the art

could possess the requisite motivation to combine Lazzery with Lightbody given this additional requirement.

In addition, Claim 1 is also believed patentable since the rubber column of Lazzery cannot be replaced by pins without improper hindsight by "use[ing] the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention," see *In Re Denis Rouffet*, 47 USPQ.2d 1453, 1457-58 (Fed. Cir. 1998).

Consequently, Lazzery in view of Lightbody fails to anticipate Applicants' invention. Consequently, Claim 1 is believed patentable over Lazzery in view of Lightbody for at least these reasons.

Claims 2-3 and 5-10 depend from Claim 1 and are believed patentable for at least the same reasons. Applicants believe that the amendment to Claim 1 additionally renders the 35 U.S.C. § 103(a) rejections of Claims 5, 7, and 9 moot. In addition, Claims 2-3 and 5-10 are also deemed to define additional aspects of the invention, and should be individually considered on their own merits.

In view of the foregoing, it is respectfully submitted that the currently pending claims, as herein amended, clearly define statutory subject matter. Accordingly, allowance of the currently pending claims is now respectfully submitted to be justified, and favorable consideration is earnestly solicited.

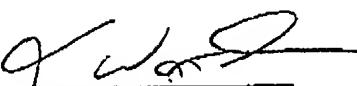
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